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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,073	01/22/2002	Takashi Murakami	2001P014480	3393
21254	7590	04/05/2006		
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER PAN, YUWEN	
			ART UNIT 2618	PAPER NUMBER

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/051,073	MURAKAMI, TAKASHI	
	Examiner	Art Unit	
	Yuwen Pan	2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-13, and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/11/06 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 8, the applicant argues that prior art of record, JP '110, doesn't teach or suggest that power from the battery is supplied via the cable to the radio circuit. The examiner respectfully disagrees because the term "radio circuit" could be any electronic components, such that receiving amplifier (LNA), transmit amplifier, low pass filter, band pass filter, and etc. So anyone of the electronic components by itself or together constitute radio circuit. In other word, radio circuit by itself is a really broad term. Thus, amplifier 7, at least part of radio circuit, is power by the battery 23 indirectly via cable 32.

Furthermore, Nakamura already teaches all the essential elements of applicant's invention in which a wireless device operated both transmission and reception of radio signal and a reception dedicated signal via switches and switch controller. The idea is related to selective diversity antennas techniques in which select the antenna with better reception. Nakamura doesn't expressly teach that how all the electronic elements have been distributed into housings

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and been interconnected by a cable. It is obvious to arrange all the electronic components according to the housing structure of the wireless device. And if there are two housings such as foldable device, all the electronic components must be power by the battery via a power supplier through power supply circuit. Thus, when at least one of electronic components that is located different housing from the power supplier, there must be some connecting element such as cable or wire interconnect both housing and render power to the electronic component via the cable.

Same arguments apply, mutatis mutandis, to claim 27 and 14-18.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Wataya (JP09046110).

Wataya discloses a portable telephone set comprising a radio circuit for demodulating a radio signal received by an antenna and transmitted via a cable (item 32, paragraph 27), and a battery (item 9) for supplying power to the radio circuit (paragraph 21), wherein: the battery and the radio circuit are interconnected by the cable, and power from the battery is supplied via the cable to the radio circuit (see figure 1).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (US006243563B1) in view of Wataya (JP09046110).

Per claim 1, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6).

Nakamura doesn't expressly teach that how all the electronic elements have been distributed into housings and been interconnected by a cable. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 8, 21, 22, and 32). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 2, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6). Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 8, 21, 22, and 32). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 3, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6). Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit

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provided in a second housing, the switch and the radio circuit being interconnected by a cable, and a battery for supplying power to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 8, 21, 22, and 32), and a battery for supplying power (see figure 1 and items 9 and 23) to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 4, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6), and the individual antennas being secured. Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable. Wataya teaches that the switch provided in a first

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housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 8, 21, 22, and 32). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claim 5, Nakamura discloses a portable telephone (figure 2) set comprising a detector for detecting the better receiving sensitivity one of radio signals received by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals (column 3 and lines 25-39), a switch for selecting the radio signal determined in the detector to be the better receiving sensitivity one (column 3 and lines 10-23), and a radio circuit for demodulating the radio signal from the switch (item 6), and the individual antennas being secured. Nakamura doesn't expressly teach that the switch provided in a first housing, a radio circuit provided in a second housing, the switch and the radio circuit being interconnected by a cable, and a battery for supplying power to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being supplied via the cable to the radio circuit. Wataya teaches that the switch provided in a first housing, a radio circuit provided in a second housing and the switch and the radio circuit being interconnected by a cable (see figure 1, items, 8, 21, 22, and 32), and a battery for supplying power (see figure 1 and items 9 and 23) to at least the radio circuit, said battery being provide on a side of the first housing, the switch an the radio circuit being interconnected by a cable and power from the battery being



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supplied via the cable to the radio circuit. It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Wataya with Nakamura's device such that the transmitter with which attenuation by transmission on the body of a transmitter of an input signal can be compensated via a cable.

Per claims 6, and 14, Wataya further teach that the radio circuit and the cable are connected in parallel via coils and capacitors (see figure 1 and items 10, 17 and 32), and power from the battery is supplied via the coil side to the radio circuit (see item 22), and a radio signal received by either one of the antennas is transmitted via the capacitor side to the radio circuit. Per claims 7 and 15-18, Wataya further teach that the cable is a coaxial cable (see figure 1 and item 32).

*Allowable Subject Matter*

5. Claims 9- 13, and 19-21 are allowed.

Prior art of record doesn't teach that a portable telephone set including a first housing provided with a first and a second terminals to be connected with a first and second external antennas, and a second housing electrically connected via a coaxial cable and mechanically connected with the first housing, and interrelation and position of each substantial element of the portable phone within the vicinity of the housings.


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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anderson D. Matthew can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Yuwen Pan  
March 31, 2006

  
Matthew Anderson  
SPE 2618